



DEPARTMENT OF DEFENSE

AUDIT REPORT

WARTIME EXPANSION CAPACITY OF
MILITARY HOSPITALS IN CONUS

No. 90-040

February 27, 1990

*Office of the
Inspector General*



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Abstract This is our final report on the Audit of Wartime Expansion Capacity of Military Hospitals in CONUS for your information and use. Comments on a draft of this report were considered in preparing this final report. We made the audit from May through September 1989, at the request of the Assistant Secretary of Defense (Health Affairs) because of a Program Decision Memorandum directed study of Wartime Medical Requirements. The objective of our audit was to determine the maximum bed capacity of CONUS hospitals and the executability of the Army's plans for creating expanded bed capacity in other facilities during wartime. We did not assess the adequacy of internal controls applicable to the audit objectives because reported bed capacities and mobilization expansion plans were not considered assessable units, and the subjective nature of planning did not lend itself to the process. The audit showed that : -he Military Departments could meet or exceed their reported expanded bed capacities using CONUS hospitals and other facilities. However, the Army will have a shortfall of about 18,000 beds after mobilization until construction of required mobilization-design hospitals and wards is completed. Improvements were necessary in the Army's Mobilization Plan to provide restorative and rehabilitative patient care in CONUS hospitals. The results of the audit are summarized in the following paragraph, and the details, recommendations, and management comments are in Part II of this report.		

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February 27, 1990

**MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (FINANCIAL
MANAGEMENT)**

**SUBJECT: Audit Report on Wartime Expansion Capacity of Military
Hospitals in CONUS (Report No. 90-040)**

This is our final report on the Audit of Wartime Expansion Capacity of Military Hospitals in CONUS for your information and use. Comments on a draft of this report were considered in preparing this final report. We made the audit from May through September 1989, at the request of the Assistant Secretary of Defense (Health Affairs) because of a Program Decision Memorandum directed study of Wartime Medical Requirements. The objective of our audit was to determine the maximum bed capacity of CONUS hospitals and the executability of the Army's plans for creating expanded bed capacity in other facilities during wartime. We did not assess the adequacy of internal controls applicable to the audit objectives because reported bed capacities and mobilization expansion plans were not considered assessable units, and the subjective nature of planning did not lend itself to the process.

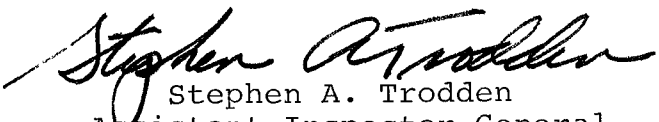
The audit showed that the Military Departments could meet or exceed their reported expanded bed capacities using CONUS hospitals and other facilities. However, the Army will have a shortfall of about 18,000 beds after mobilization until construction of required mobilization-design hospitals and wards is completed. Improvements were necessary in the Army's Mobilization Plan to provide restorative and rehabilitative patient care in CONUS hospitals. The results of the audit are summarized in the following paragraph, and the details, recommendations, and management comments are in Part II of this report.

The Army will have a temporary shortfall of capacity because it plans to care for all patients who can be returned to duty within 60 days. The Army plans to provide capacity for 43,700 beds by constructing mobilization-design hospitals and separate wards. However, Army hospitals have identified capacity for temporary conversion for only 25,700 beds until construction is completed 6 to 12 months after mobilization. Additionally, 13 of the 18 Army medical activities that we visited had not planned for required modifications to hospitals or other facilities that will be used for temporary patient care. We recommended that the Army realign hospital bed requirements to ensure that they are compatible with capacity, require that all activities identify and document the additional buildings needed for expanded mobilization requirements and the necessary modifications, and verify the adequacy of Army mobilization planning (page 5).

A draft of this report was provided to the Assistant Secretary of the Army for review and comments on November 28, 1989. Comments on the draft report were received from the Office of the Surgeon General, Department of the Army, on February 5, 1990. Management comments are summarized in Part II of this report and the complete text is provided in Appendix C. The Surgeon General of the Army fully concurred with the finding and recommendations. The management actions taken or planned are responsive to our recommendations and conform to the provisions of DoD Directive 7650.3. This report identifies no potential monetary benefits; however, other benefits are shown in Appendix D. No unresolved issues exist on the audit finding or recommendations. Accordingly, additional management comments on the final report are not required.

Although we make recommendations in the report only to the Army, this in no way implies that Army planning for care of casualties during a major conflict is less adequate than plans in the Navy and Air Force. We made recommendations to the Army because the Army plans to take care of all casualties that can be returned to duty within 60 days, whereas the Navy and Air Force planned to care for only a part of the number of casualties returning from overseas for medical treatment. There are much larger issues that need to be addressed prior to making any conclusions regarding the readiness posture. Some of these issues are briefly discussed in Part I of the report under "Other Matters of Interest."

The courtesies extended to the audit staff are appreciated. A list of audit team members is in Appendix F. Copies of this report are being provided to the activities listed in Appendix G. If you have any questions concerning this audit, please contact Mr. Ronald Porter on (202) 693-0163 (AUTOVON 223-0163) or Mr. Richard A. Brown on (202) 693-0318 (AUTOVON 223-0318).


Stephen A. Trodden
Assistant Inspector General
for Auditing

cc:
Secretary of the Army
Secretary of the Navy
Secretary of the Air Force
Assistant Secretary of Defense (Health Affairs)

WARTIME EXPANSION
CAPACITY OF MILITARY HOSPITALS IN CONUS

TABLE OF CONTENTS

	<u>PAGE</u>
TRANSMITTAL MEMORANDUM/EXECUTIVE SUMMARY	i
PART I - INTRODUCTION	1
Background	1
Objectives and Scope	2
Internal Controls	4
Prior Audit Coverage	4
Other Matters of Interest	4
PART II - FINDING AND RECOMMENDATIONS	7
Estimated Requirements for Patient Bed Capacity	7
APPENDIX A - Expanded Bed Capacity	15
APPENDIX B - CONUS Hospital Expansion Projections	19
APPENDIX C - Office of the Surgeon General, Department of the Army, Comments	21
APPENDIX D - Summary of Potential Monetary and Other Benefits Resulting from Audit	25
APPENDIX E - Activities Visited or Contacted	27
APPENDIX F - Audit Team Members	29
APPENDIX G - Final Report Distribution	31

Prepared by:
Readiness and Operational
Support Directorate
Project No. 9FR-5015

WARTIME EXPANSION
CAPACITY OF MILITARY HOSPITALS IN CONUS

PART I - INTRODUCTION

Background

Military hospitals within the continental United States (CONUS) have two primary responsibilities during wartime: to provide medical care to military casualties returning from overseas conflicts and to provide medical care to the active duty forces stationed in CONUS. Since military medical departments exist primarily to provide quality health care services in support of military operations, they must be prepared to treat casualties from low-intensity conflict to global, high-intensity warfare. DoD has historically relied on its own medical resources to care for sick and wounded personnel evacuated from overseas conflicts. This self-reliance was possible in the past because sufficient time had been available to build up the medical support system to provide treatment to the sick and wounded. However, current wartime planning scenarios discuss U.S. involvement in short, but intense, conventional warfare. Many casualties could be quickly incurred, and a hasty buildup of medical care capability would be required in the theater of operations and in CONUS. Recognizing these difficulties, DoD established an objective that the Military Departments treat, at a minimum, casualties that can be returned to duty within 60 days and casualties that require specialized treatment not available from other sources regardless of the time frame for returning to duty. The remaining casualties are to be diverted to civilian hospitals under the National Disaster Medical System and to hospitals of the Department of Veterans Affairs.

DoD operational capacity and wartime expansion capacity at CONUS hospitals have decreased over the past 30 years because open ward hospitals have been replaced by hospitals constructed with one-, two-, and four-patient rooms. Today, the combined CONUS direct health care system of the Army, Navy, and Air Force consists of about 126 hospitals with fewer than 15,000 beds that are set up, staffed, and equipped. During mobilization, the DoD medical system will expand the capacities of its facilities beginning at mobilization day (M-Day). To accomplish this expansion, DoD's policy during wartime is to compress peacetime bed spacing criteria by 35 percent within existing hospitals.

DoD policy requires that the Military Departments efficiently expand their health care treatment base in CONUS by providing restorative and rehabilitative care to patients returning from combat and from mobilizing and deploying forces. Each medical treatment facility is required to prepare a mobilization

expansion plan that makes maximum use of existing facilities and to ensure that available bed capacity within the facilities will be readied for acute care patients.

Objectives and Scope

The Assistant Secretary of Defense (Health Affairs) requested this audit on March 8, 1989, in response to a Program Decision Memorandum (PDM), which directed a study of Wartime Medical Requirements. The Assistant Secretary requested that the Office of the Inspector General, DoD, audit the maximum bed capacity of CONUS hospitals that the Military Departments plan to operate in wartime, and the executability of the Army's plan for creating expanded bed capacity in other facilities. The Assistant Secretary requested the audit because of concern that the Military Departments' reports of available beds during a major contingency were inaccurate and overstated, that each Military Department used different criteria for indicating expanded bed availability, and that a reliable count of available beds was needed for future programming actions and for the refinement of mobilization plans. Our objectives were to determine the maximum bed capacity of CONUS hospitals that the Military Departments plan to operate in wartime and to evaluate how the Army will execute its plan for creating expanded bed capacity in other facilities.

After our survey, we determined that we could not perform our announced objective to determine the maximum bed "capability" of CONUS hospitals during wartime. The Assistant Secretary of Defense (Health Affairs) did not provide a definition of hospital "capability" for audit purposes and did not identify specific types of patient care, which require different equipment and ancillary support. In addition, "capability" cannot be determined without a review of staffing, which was never envisioned for the audit by either the Assistant Secretary or the Inspector General. Therefore, we redefined our objective to determine the maximum bed capacity of CONUS hospitals.

We evaluated the reported bed capacities in existing hospitals and the feasibility of achieving the expanded bed capacities. We then compared reported capacities with our audit results. In making our determinations, we used the compressed square footage criteria, established by DoD, of 72 square feet per patient bed in rooms designed for patients as well as other areas, such as dayrooms, lounges, waiting rooms, classrooms, and available clinic space. We performed similar evaluations for designated nonmedical facilities, "buildings of opportunity," near hospitals that the Army and Air Force planned to use for expanded patient care.

We reviewed planned modifications necessary for expanded bed capacity in order to determine if the modifications had been adequately identified, documented, and coordinated with the installation planners and engineers. We also identified the time frames for completion of the modifications. For each medical mobilization plan, our audit approach included a limited evaluation of: the adequacy and feasibility of turning "buildings of opportunity" into patient care areas and the time frames for modification plans to be carried out; the adequacy of coordination between the hospitals and installation mobilization planners, when required, including the modification and repair work on buildings that had been identified and documented for use as patient care areas; and the method the hospitals and installation planners would use to obtain necessary equipment and materiel.

We did not evaluate the total requirements for 87,000 patient beds. We evaluated only whether the Military Departments could meet the requirements. However, in Part II of this report, we changed the total Army patient bed requirements from 65,000 to 66,400 to reflect the most recent requirements reported in the Army Mobilization Plan, Volume 8, change 10, February 9, 1988. The 66,400 bed requirements should have been shown in the PDM directed study as the Army's portion of the total DoD requirements for patient beds.

Because it was not practical to visit all 126 hospitals in the CONUS health care system, we selected a statistical random sample by region of 39 hospitals that were planning to provide medical care in CONUS during mobilization. These hospitals are shown in Appendix A. The auditors strove to be as objective as possible in determining the maximum bed capacity of hospitals visited and other facilities designated for expansion. However, auditors exercised individual judgment because of different room configurations and information from health care professionals at each hospital visited. The auditors made efforts to locate additional hospital bed space in the hospital or in "buildings of opportunity" if reported requirements or capacities could not be satisfied.

When we began the audit, the Army Audit Agency (AAA) was in the verification phase of an Army-wide audit that included mobilization planning by Army medical activities in CONUS. To prevent possible duplication of effort, the AAA calculated the expanded bed capacities at four of our sample hospitals where it was auditing and provided us with the results for inclusion in this report.

This program results audit was performed from May through September 1989 in accordance with auditing standards issued by

the Comptroller General of the United States as implemented by the Inspector General, DoD. Activities visited or contacted are shown in Appendix E.

Internal Controls

We determined that the reported bed capacities and mobilization expansion plans are not assessable units for determining the adequacy of internal management controls in accordance with the Office of Management and Budget Circular A-123. Planning is subjective in nature and does not lend itself to the internal management control process.

Prior Audit Coverage

There have been no audits in the past 5 years covering the specific issues discussed in this report. However, AAA performed an Army-wide audit of the "Pre-positioned Medical War Reserves Program" concurrent with our audit. That audit included a review of medical war reserve requirements to include budgeting, storing, and maintaining equipment and a review of mobilization planning by Army medical activities. As of the date of our final report, the draft report on the Army-wide audit is being staffed at the Office of the Surgeon General, Department of the Army.

Other Matters of Interest

Several issues surfaced during this audit that concerned us, but they are not discussed elsewhere in this report because of the audit's limited scope and objectives.

- The Army plans to care for all patients expected to be returned to duty within 60 days. This concept differs radically from the Navy's and Air Force's plan to treat only a part of the number of patients able to return to duty within 60 days. The Assistant Secretary of Defense (Health Affairs) may wish to evaluate these differing concepts with a goal of achieving uniform policy among the Military Departments.

- Reviews of expanded bed capacities at civilian and Department of Veterans Affairs hospitals are essential before any conclusions can be made regarding patient care capability during mobilization.

- Expanded bed capacity was not the principal concern at many of the medical activities visited. Responsible personnel stated that a lack of medical staff at CONUS hospitals would pose a much more serious problem during mobilization than the attainment of the required bed "capacity" to treat casualties. We also noted that hospitals that we visited generally did not

have sufficient medical equipment available to cope with significant increases in patients requiring "intensive" care.

Before medical staffing, equipment, and supply requirements can be determined, the types of casualties expected to be treated need to be established, and staffing and equipment requirements need to be developed. Once such requirements have been developed, evaluations and conclusions can be made regarding the Military Departments' readiness to care for casualties during a major conflict.

PART - II FINDING AND RECOMMENDATIONS

Estimated Requirements for Patient Bed Capacity

FINDING

The Military Departments could meet or exceed their planned expanded bed capacities for patients in hospitals and other facilities (buildings of opportunity). However, the Army will have a temporary shortfall of capacity for about 18,000 patient beds until mobilization-design (M-design) hospitals and separate wards are constructed and completed about 6 to 12 months after mobilization. At 13 of the 39 Military Department hospitals we visited, our estimates of expanded bed capacities varied significantly from expanded bed capacities that were reported. Activities did not follow established bed capacity criteria, did not conduct accurate capacity surveys, did not adequately coordinate with host installations, and did not properly distribute bed requirements. In addition, 13 of the 18 Army activities visited did not adequately plan and document required modifications and alterations to hospitals and temporary patient care areas, because the Army medical activities did not make advance mobilization planning a priority. As a result, the availability of restorative and rehabilitative patient care could be delayed, and the estimated patient bed requirements for civilian and Department of Veterans Affairs hospitals could be underestimated.

DISCUSSION OF DETAILS

Background. In December 1988, personnel from various offices within the Office of the Secretary of Defense and the Office of the Assistant Secretary of Defense (Health Affairs) and from each Military Department's Office of the Surgeon General formed a steering group to complete a study of wartime medical requirements that was directed by a Program Decision Memorandum. This steering group was chaired by the Assistant Secretary of Defense (Program Analysis and Evaluation). The study, "Wartime Medical Requirements," indicated that the Military Departments would require about 87,000 patient beds within CONUS after full mobilization to treat casualties (Army, 50,000; Navy, 19,000; and Air Force, 18,000) returning from overseas conflicts. This requirement is based on the capacity needed to treat patients that could be returned to duty within 60 days of arrival in CONUS and does not include patients requiring extended care or convalescence. In addition to beds needed for combat casualties, the Army would require about 15,000 beds for patients with disease and nonbattle injuries within CONUS. The Navy and Air Force would each require about 12,000 additional beds for the same purpose.

DoD cannot build sufficient hospitals and maintain them in a ready-and-waiting status for wartime casualties of this magnitude. Because sufficient bed capacity does not exist in military hospitals in CONUS, the Military Departments will have to rely on civilian and Department of Veterans Affairs hospitals and modified, nonmedical facilities to care for patients. Each Military Department has chosen a different medical mobilization planning concept for the care of combat casualties and for the treatment of disease and nonbattle injuries within CONUS.

The U.S. Army Health Services Command (HSC) is responsible for planning Army health care in CONUS. The HSC has developed detailed guidance and planning for essential health care during mobilization. The Army plans to accommodate all patients who can be returned to active duty within approximately 60 days. To meet its objective of 66,400 patient beds, the Army plans to expand existing hospitals, to reactivate a limited number of inactive military hospitals, and to construct hospitals and separate wards after mobilization. The Army also plans to utilize "buildings of opportunity" to house patients while mobilization hospitals are being built.

To meet its objective of 31,000 beds, the Navy plans to utilize and expand existing hospitals to make capacity for about 8,500 beds for acute care patients and to reactivate one former hospital with 1,100 beds for minimal care patients. The remaining 21,400 beds will be in civilian and Department of Veterans Affairs hospitals.

To meet its objective of 30,000 beds, the Air Force plans to expand about 50 percent of its existing hospitals to about 7,700 beds by putting about 5,600 minimal care patients in transient quarters, barracks, and gymnasiums, or "buildings of opportunity." The remaining 16,700 beds will be in civilian and Department of Veterans Affairs hospitals.

Army's Ability to Meet Its Requirements. To meet its 66,400-bed requirement, the Army planned to increase the number of beds in existing hospitals from the current 6,500 to 15,900 in wartime. The Army also planned to convert portions of inactive hospitals and other hospital-owned buildings into space for an additional 6,800 beds within 90 days after mobilization.

The Army was to provide capacity for the remaining 43,700 beds by constructing 46 mobilization hospitals and 67 separate, 46-bed wards. Since construction was not expected to be completed until 6 to 12 months after mobilization, the Army planned to temporarily convert "buildings of opportunity" into patient care facilities. Hospitals had identified capacity for only 25,700 beds in "buildings of opportunity," leaving a deficiency of 18,000 beds until construction is completed.

Although the HSC was aware of this deficiency, it had not taken actions to acquire additional buildings for use until construction of mobilization hospitals and separate wards was completed. Since the Army Audit Agency planned to make a detailed report on mobilization planning at Army medical activities following its audit, "Pre-positioned Medical War Reserves Program," AAA Project No. T8347C, we did not address this condition in our report.

In the Army's Mobilization Plan, construction and renovation plans did not coincide with the locations having requirements for expanded bed capacity. When we compared requirements by hospital with plans to construct or renovate buildings, we found that 11 of the 55 hospitals with mobilization requirements had planned either to build or to restore hospitals or wards for approximately 7,000 patients at locations where they were not required. For example:

- The Army's Mobilization Plan showed requirements to build M-design hospitals at four installations that had reported the ability to achieve mobilization requirements without M-design hospitals.

- Fort Chaffee, Arkansas, reported a capacity for about 1,600 beds after renovation of an inactive hospital. However, requirements for only 300 beds were shown in the Army's Mobilization Plan.

During mobilization, patients would be allocated to hospitals that had beds available regardless of where requirements were identified in planning documents. However, requirements during mobilization could be met more easily if required and planned bed capacities coincided.

The Army may not have the capability to properly house the expected patient mix for some "buildings of opportunity" designated by the Army, until M-design hospitals are constructed. DoD planning guidance indicates that 70 percent of the patients will require intensive and intermediate care, and only 30 percent will require minimal care, which is the type of care planned for patients in "buildings of opportunity." Current Army hospitals account for only a third of total planned bed capacity (until M-design hospitals are built). Of the 18 Army hospitals included in our sample, 13 planned to put more than 30 percent of expected patients in "buildings of opportunity." This data indicates the Army may have problems in providing quality care for patients requiring intensive and intermediate care in this environment.

Capacity to Care for Patients During Mobilization. Our review at 39 of 114 hospitals with mobilization requirements in

the Military Departments showed that each Department could meet or exceed the mobilization capacities reported to its headquarters. Expanded capacity figures for the sampled hospitals are shown in Appendix A. However, Appendix A represents bed capacities only in existing hospitals and in "buildings of opportunity" currently available to the hospitals. No additional buildings were considered. We selected the hospitals in our audit using random statistical sampling techniques; we projected the results to the total universe of hospitals with mobilization missions. This projection indicated that total bed capacity was about 3 percent greater than the reported capacity for 71,433 beds. (See Appendix B for projections.)

Army. Although the difference between total capacity reported by the Army and total capacity projected by the audit was minimal, we found significant differences at 9 of the 18 Army hospitals visited. For example:

- At William Beaumont Army Medical Center, Fort Bliss, Texas, we disallowed expanded capacity for 250 reported beds because the mobilization planner did not use the appropriate space criterion of 72 square feet per patient. Patients would be crowded into some rooms with only 53 square feet per patient.

- Darnall Army Community Hospital, Fort Hood, Texas, planned to use schools as medical facilities. The mobilization planner had computed the space required for a patient bed and end table using a template, rather than using the DoD criterion of 72 square feet per patient. As a result, the reported bed capacity was overstated by more than 200 beds.

- The Evans Army Community Hospital, Fort Carson, Colorado, had capacity for about 600 more beds than reported. The additional capacity was available in a former hospital controlled by the Evans Army Community Hospital. The available capacity had not been identified because the Evans Army Community Hospital had not received additional requirements.

Navy. Six of the eight Navy activities we visited met or exceeded reported expanded bed capacities. The Navy misstated capacity figures generally because it did not consider and utilize discontinued clinics (pediatrics and obstetrics), and administrative spaces that would not be essential during mobilization. Also, the Navy mobilization planners carried forward inaccurate or outdated capacity figures from reports of previous years. At five of the eight hospitals visited, hospital planners had not planned to use nurseries for expanded bed capacity even though nurseries would be available at mobilization and would be equipped with controlled air supplies, medical gases, and patient monitors.

Air Force. According to the April 1987 U.S. Air Force 1987-1988 War and Mobilization Plan, Volume 1, the Air Force planned to put 13,337 patient beds at 35 CONUS medical treatment facilities designated to receive and treat casualties returning from overseas. We visited 13 of the 35 medical treatment facilities and found that reported capacities were generally accurate or slightly understated. However, the reported capacities are subject to change because of a five-phase analysis being performed by the Medical Readiness Division of the Air Force's Office of the Surgeon General. This analysis will validate selected CONUS hospitals' wartime capabilities, which include capacities.

Coordination With Host Installations. The hospitals' and host installations' coordination on housing patients in nonmedical buildings during mobilization was generally adequate. Improvements in coordination and planning for nonmedical buildings were needed at 5 of the 17 Army hospitals in our sample that planned to expand patient care to "buildings of opportunity." For example, Madigan Army Medical Center, Fort Lewis, Washington, planned to use two floors in nine modified buildings. However, planning documents at Fort Lewis headquarters showed that all three floors in six modified buildings would be used for patients. At Fitzsimmons Army Medical Center, Denver, Colorado, support agreements had not been negotiated to require tenant activities to vacate buildings planned for hospital use during mobilization. An existing Intra-Service Support Agreement between Ireland Army Community Hospital, Fort Knox, Kentucky, and the host installation indicated that several barracks would be available within 60 days after mobilization. However, master planning personnel at Fort Knox, Kentucky, estimated that the installation could not make the barracks available until 120 days after mobilization.

Identification and Planning for Required Building Modifications. Thirteen of the eighteen Army medical activities visited had not adequately planned and documented required modifications and alterations to hospitals or other patient care facilities. For example:

- Evans Army Community Hospital, Fort Carson, Colorado, had not prepared specific requirements or work orders for a former hospital planned for use during mobilization. The hospital planned to identify specific work required when "world tensions" indicated the need.

- Moncrief Army Community Hospital, Fort Jackson, South Carolina, planned to use a bowling alley, racquetball courts, and an enclosed swimming pool filled with sand for patient care during mobilization. Although installation

engineers were aware of this general plan, work orders or other documentation had not been prepared to show what specific modifications or alterations would be needed.

- Dewitt Army Community Hospital, Fort Belvoir, Virginia, planned modifications to convert two schools and a hospital administrative building into patient care areas. The schools had been surveyed by the hospital professional staff and certain needs had been discussed. However, the installation master planner and engineers had not been notified of the hospital's requirements so that contingency work orders could be prepared.

Conclusion. Most of the problems identified in this report pertain to Army planning. However, in our opinion, the Army is not necessarily less prepared to accommodate patients during mobilization than the Navy or the Air Force. We are making recommendations only to the Army because it had a shortfall of capacity in its plan to treat 100 percent of its post-mobilization patients who could be returned to duty within 60 days. The Navy planned to divert 69 percent of its patients to civilian and Department of Veterans Affairs hospitals, and the Air Force planned to care for 56 percent of its patients in the same manner. Accordingly, the Navy and Air Force will not have some of the logistical problems that the Army will face following mobilization.

RECOMMENDATIONS FOR CORRECTIVE ACTION

We recommend that the Commander, Army Health Services Command:

1. Realign hospital bed requirements for mobilization so that building construction and renovation are planned and executed only at locations where capacity shortfalls exist in relation to the Army Mobilization Plan.
2. Require Army hospitals to identify buildings needed to meet expanded capacity requirements stated in the Army Mobilization Plan, document the identified need, and coordinate the need with host installations.
3. Require hospital commanders to certify that building modifications and alterations necessary for expanded mobilization requirements have been identified and that valid work orders for the modifications and alterations have been prepared.
4. Conduct on-site assistance and management reviews to ensure mobilization planning is and remains adequate.

MANAGEMENT COMMENTS

The Surgeon General of the Army fully concurred with the finding and recommendations and provided completion dates for actions planned or taken.

AUDIT RESPONSE TO MANAGEMENT COMMENTS

The Surgeon General's response to Recommendation 3. did not clearly detail the planned corrective actions at the hospital level. However, in discussions with officials at the Office of the Surgeon General, we were advised that hospital commanders will be required to indicate on their annual facilities survey reports that necessary building modifications and alterations for expanded mobilization requirements have been identified and valid work orders prepared. This action fully satisfies the intent of our Recommendation.

EXPANDED BED CAPACITY

	Location	Number of Beds in Expanded Capacity					
		Within Hospital		Other		Total	
		Reported	Audit	Reported	Audit	Reported	Audit
Army Hospitals							
Beaumont Army Medical Center	Fort Bliss, TX	1,100	845	1,200	950	2,300	1,795
Blanchfield Army Community Hospital	Fort Campbell, KY	260	364	2,298	2,430 1/	2,558	2,794
Bliss Army Community Hospital	Fort Huachuca, AZ	123	130	52	80	175	210
Brooke Army Medical Center	Fort Sam Houston, TX	1,024	1,423	1,080	1,078 2/	2,104	2,501
Darnall Army Medical Center	Fort Hood, TX	386	460 2/	2,257	2,055 2/	2,643	2,515
Dewitt Army Medical Center	Fort Belvoir, VA	316	320	426	525	742	845
Eisenhower Army Medical Center	Fort Gordon, GA	1,000	1,000	1,194	1,194	2,194	2,194
Evans Army Community Hospital	Fort Carson, CO	212	228	363	961 3/	575	1,189
Fitzsimmons Army Medical Center	Denver, CO	812	640 2/	2,223	1,364 2/	3,035	2,004
Hays Army Community Hospital	Fort Ord, CA	568	651	1,324	1,344 2/4/	1,892	1,995
Ireland Army Community Hospital	Fort Knox, KY	564	600 2/	751	624 2/4/	1,315	1,224
Irwin Army Community Hospital	Fort Riley, KS	329	324	220	311	549	635
Madigan Army Medical Center	Fort Lewis, WA	1,449	1,449	907	963	2,356	2,412
Martin Army Community Hospital	Fort Benning, GA	578	633	540	540	1,118	1,173
Moncrief Army Community Hospital	Fort Jackson, SC	665	704	815	815	1,480	1,519
Walter Reed Army Medical Center	Washington, DC	1,321	1,321 2/5/	1,354	1,354 2/	2,675	2,675
Womack Army Community Hospital	Fort Bragg, NC	616	696	2,250	2,250	2,866	2,946
Wood Army Community Hospital	Fort Leonard Wood, MO	624	673	0	0	624	673
Totals		<u>11,947</u>	<u>12,461 6/</u>	<u>19,254</u>	<u>18,838</u>	<u>31,201</u>	<u>31,299</u>
Navy Hospitals							
National Naval Medical Center	Bethesda, MD	779	985	0	0	779	985
Naval Hospital	Camp Lejeune, NC	284	340	0	0	284	340
Naval Hospital	Great Lakes, IL	887	1,068	0	0	887	1,068
Naval Hospital	Jacksonville, FL	496	411	0	0	496	411
Naval Hospital	Long Beach, CA	692	702	0	0	692	702
Naval Hospital	Oakland, CA	879	770	0	0	879	770
Naval Hospital	Portsmouth, VA	873	938	0	0	873	938
Naval Hospital	San Diego, CA	561	633	1,102	1,102	1,663	1,735
Totals		<u>5,451</u>	<u>5,847</u>	<u>1,102</u>	<u>1,102</u>	<u>6,553</u>	<u>6,949</u>

See footnotes at end of chart.

EXPANDED BED CAPACITY (Continued)

	Air Force Hospitals	Location	Expanded (Bed) Capacity				
			Within Hospital		Other		Total
			Reported	Audit	Reported	Audit	
	Air Force Academy Hospital	U.S. Air Force (USAF) Academy, CO	205	206	190	500 <u>7/</u>	395 706
	Air University Regional Hospital	Maxwell Air Force Base (AFB), AL	192	216	450	440 <u>8/</u>	642 656
	David Grant USAF Medical Center	Travis AFB, CA	480	621	200	200	680 821
	Eglin Air Force System Command (AFSC) Regional Hospital	Eglin AFB, FL	275	255	0	0	275 255
	Keester USAF Medical Center	Keester AFB, MS	433	479	425	434	858 913
	Luke USAF Hospital	Luke AFB, AZ	192	192	0	0	192 192
	Malcolm Grow USAF Medical Center	Andrews AFB, MD	420	420	200	200 <u>9/</u>	620 620
	Minot USAF Hospital	Minot AFB, ND	75	75	0	0	75 75
	Patrick AFSC Hospital	Patrick AFB, FL	83	83	0	0	83 83
	Robert L. Thompson Strategic Hospital	Carswell AFB, TX	299	320 <u>10/</u>	0	0	299 320
	Scott USAF Medical Center	Scott AFB, IL	400	400	200	200	600 600
	Wilford Hall USAF Medical Center	Lackland AFB, TX	1,000	1,071	0	0	1,000 1,071
	Wright-Patterson USAF Medical Center	Wright-Patterson AFB, OH	433	433	210	206 <u>11/</u>	643 639
	Totals		4,487	4,771	1,875	2,180	6,362 6,951
	Grand Total		21,885	23,079	22,231	22,120	44,116 45,199

1/ This figure includes 1,056 beds in an inactive hospital that is expected to be ready for use during the first 3 months after mobilization. We did not include an additional 400 to 600 beds in this inactive hospital (several buildings constitute the hospital) that could be made available in 6 or more months. During the audit, installation personnel were trying to obtain permission to remove these buildings from medical mobilization plans due to their dilapidated condition and the extensive work required to restore them for mobilization purposes.

2/ The Army Audit Agency provided the expanded capacity data.

EXPANDED BED CAPACITY (CONTINUED)

- 3/ The reported capacity was increased by approximately 600 beds since the hospital retained possession of several buildings from a former hospital. There were no plans to use this capacity for patients since the hospital was able to achieve its established mobilization requirements without it. We also found capacity for approximately 1,200 beds in other former hospital buildings that had already been turned over to Fort Carson. This capacity was not shown in the figures since coordination with Fort Carson would be needed to obtain the capacity.
- 4/ We included the capacity for 338 beds that were to be available 2 months after mobilization according to the Intra-Service Support Agreement. However, the base engineers estimated the capacity would not be available until 4 months after mobilization. We did not include the capacity for an additional 200 beds in a former hospital that was not expected to be available until 6 months after mobilization.
- 5/ Reported data were not adjusted due to strong objections by hospital personnel, because additional dedicated gas outlets and call buttons were not available. The reported capacity figure might be increased slightly if additional requirements were given.
- 6/ Minimal modifications would be needed to reach the audited capacities identified except at Brooke Army Medical Center, Fort Sam Houston, where more extensive work would have to be done to reach the increased expansion capacity identified by the audit.
- 7/ The Air Force Academy was planning to use the indoor football field of a large field house for 190 minimal care patients. This field house also contained a basketball court and an ice hockey rink which could be used if necessary. This building could easily accommodate two to four times as many minimal care patients as planned, if required. To be conservative, we arbitrarily showed a 500-bed capacity even though considerable additional expansion potential exists.
- 8/ The base mobilization planner indicated 7 additional buildings to house approximately 1,000 minimal care patients could be made available, if required. However, we did not include the buildings, because the hospital had not been given a requirement and had no plans to use the buildings.
- 9/ Hospital personnel indicated capacity for an additional 200 beds could be available in the same building if the requirement existed. We did not include the additional capacity since the hospital planned to put medical staff in that part of the building.
- 10/ Capacity for only 260 beds was suitable for intermediate and intensive care patients. The remaining 60-bed capacity would have to be in clinics and rooms with doorways too small for a standard patient bed. The 60-bed capacity should be considered for minimal (ambulatory) care patients only. For practical use of the clinic space, a minor modification of a toilet stall would be required to convert it to a shower.
- 11/ We found a building next to the hospital with a capacity of 190 beds that could be used. However, the capacity was not included in this figure because the hospital had not requested the building and did not have plans to use it.

CONUS HOSPITAL EXPANSION PROJECTIONS

Based on a statistical random sample and an analysis of the reported expansion potential for all CONUS medical activities, we made the following projections (with a 95-percent confidence level and a margin of error of plus or minus 3 percent).

	<u>Universe Reported (Number of beds)</u>	<u>Universe Projected From Audit (Number of beds)</u>
<hr/> <u>Army</u> <hr/>		
Within Operating Hospitals	15,880	16,646
Other ^{1/} _{2/}	<u>32,570</u>	<u>31,949</u>
Total	<u>48,450</u>	<u>48,595</u>
<hr/> <u>Navy</u> <hr/>		
Within Operating Hospitals	8,544	9,127
Other	<u>1,102</u>	<u>1,102</u>
Total	<u>9,646</u>	<u>10,229</u>
<hr/> <u>Air Force</u> <hr/>		
Within Operating Hospitals	7,700	8,092
Other	<u>5,637</u>	<u>6,485</u>
Total	<u>13,337</u>	<u>14,577</u>
Grand Total	<u>71,433</u>	<u>73,401</u>

^{1/} Does not include 45,582 beds in mobilization hospitals and wards planned for construction during mobilization.

^{2/} Includes capacity for 4,361 beds in inactive hospitals and 2,492 beds in buildings owned by hospital activities. It is assumed that space for 25,717 beds in nonmedical facilities, "buildings of opportunity," will be returned to the host installations as completion of mobilization-design hospitals occurs.



DEPARTMENT OF THE ARMY
OFFICE OF THE SURGEON GENERAL
5109 LEESBURG PIKE
FALLS CHURCH, VA 22041-3258



REPLY TO
ATTENTION OF

31 JAN 1990

DASG-IRO

ALCIDE M. LANOUE

Major General, MC

MEMORANDUM THRU ~~CHIEF OF STAFF, ARMY~~ ² Deputy Surgeon General

~~ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND
RESERVE AFFAIRS)~~

05 FEB 1990

Robert M. Emmerichs

Deputy Assistant Secretary

(GMO) Personnel Management
and Equal Opportunity Policy)

FOR DIRECTOR, READINESS AND OPERATIONAL SUPPORT, IGMO

SUBJECT: IG DOD Draft Audit Report on Wartime Requirements
Capacity of Military Hospital in CONUS (9FR-5015)

1. This is in reply to your draft Audit Report No. 9FR-5015.
We have reviewed the findings with interest and submit the
enclosed comments.

2. In general, the report gives an adequate description of
issues and problem areas related to the wartime requirements
capacity of military hospitals. We agree with the intent of
your findings and scheduled corrective actions to implement
the recommendations.

3. Thank you for your continued interest and assistance to
our staff. Should you require any additional information,
Mr. Samih Helmy at 756-0248 is our audit oversight officer.

FOR THE SURGEON GENERAL:

Encl

Alcide M. Lanoue
ALCIDE M. LANOUE
Major General, MC
Deputy Surgeon General

CF:
SAIG-PA

OTSG Comments
IG DOD Draft Report on Wartime Requirements
Capacity of Military Hospitals
(Report No 9FR-5015)

Finding. The Military Departments could meet or exceed their planned expanded bed capacities for patients in hospitals and other facilities (buildings of opportunity). However, the Army will have a temporary shortfall of capacity for about 18,000 patient beds until mobilization-design (M-design) hospitals and separate wards are constructed and completed about 6 to 12 months after mobilization. At 13 of the 39 Military Department hospitals we visited, our estimates of expanded bed capacities varied significantly from expanded bed capacities that were reported. Activities did not follow established bed capacity criteria, did not conduct accurate capacity surveys, did not adequately coordinate with host installations, and did not properly distribute bed requirements. In addition, 13 of the 18 Army activities visited did not adequately plan and document required modification and alterations to hospitals and temporary patient care areas, because the Army medical activities did not make advance mobilization planning a priority. As a result, the availability of restorative and rehabilitative patient care could be delayed, and the estimated patient bed requirements for civilian and Department of Veterans Affairs hospitals could be underestimated.

Additional facts. None.

Recommendation 1. Realign hospital bed requirements for mobilization so that building construction and renovation are planned and executed only at locations where capacity shortfalls exist in relation to the Army Mobilization Plan.

Action Taken. Concur. The U.S. Army Health Services Command (HSC) has an ongoing Mobilization Planning System (MPS) analysis in which patient acuity factors, regional planning, and other factors are being examined to determine if a modified requirements allocation would better meet HSC missions in the continental United States (CONUS). The effort will be to eliminate as much M-design hospital construction as possible if HSC can meet its mission by alternative means. Our proposed corrective actions and milestone dates for implementation are:

a. Develop regional concept of operations for Army medical mobilization operations in CONUS. Milestone: 1 March 1990.

b. Realign mobilization bed requirements in concert with the regional concept of operations. Milestone: 1 August 1990.

c. Direct subordinate activities to examine construction and renovation requirements in line with new bed requirements.
Milestone: 31 December 1990.

Recommendation 2. Require Army hospitals to identify buildings needed to meet expanded capacity requirements stated in the Army Mobilization Plan, document the identified need, and coordinate the need with host installations.

Action Taken. Concur. Implementation of this recommendation is contingent upon completion of the corrective actions projected for Recommendation 1 above. Target: 31 December 1990.

Recommendation 3. Require hospital commanders to certify that building modifications and alterations necessary for expanded mobilization requirements have been identified and that valid work orders for the modifications and alterations have been prepared.

Action Taken. Concur. HSC Medical Mobilization Readiness Program (MMRP) is systemically conducting an assistance and management review and development of a CONUS health service support planning system which is to assess overall medical capabilities versus requirements through the development of an automated support system. HSC personnel will determine compliance with the requirements and submission of necessary work orders through on-site assistance and management reviews, effective immediately. Target date of completion is September 1991.

Recommendation 4. Conduct on-site assistance and management reviews to ensure mobilization planning is and remains adequate.

Action Taken. Concur. Headquarters, U.S. Army Health Services Command staff sections involved in mobilization planning will continue to perform regular staff visits to as many subordinate activities as possible each year within the limitations of available travel funding and personnel. This is a periodic management review and performed annually. Target date of completion is September 1991.

**SUMMARY OF POTENTIAL MONETARY AND OTHER
BENEFITS RESULTING FROM AUDIT**

<u>Recommendation Reference</u>	<u>Description of Benefit</u>	<u>Amount and/or Type of Benefit</u>
1.	Program results. Improvement in planning process provides increased readiness posture to provide restorative and rehabilitative patient care in CONUS hospitals to combat casualties returning from overseas.	Nonmonetary
2.	Program results. Improvement in planning process provides increased readiness posture to provide restorative and rehabilitative patient care in CONUS hospitals to combat casualties returning from overseas.	Nonmonetary
3.	Program results. Improvement in planning process provides increased readiness posture to provide restorative and rehabilitative patient care in CONUS hospitals to combat casualties returning from overseas.	Nonmonetary
4.	Program results. Improvement in planning process provides increased readiness posture to provide restorative and rehabilitative patient care in CONUS hospitals to combat casualties returning from overseas.	Nonmonetary

ACTIVITIES VISITED OR CONTACTED

Office of the Secretary of Defense

Office of the Assistant Secretary of Defense (Health Affairs)
Washington, DC
Office of the Joint Chiefs of Staff, Washington, DC

Department of the Army

Office of the Surgeon General, Washington, DC
U.S. Army Health Services Command, Fort Sam Houston, TX
Blanchfield Army Community Hospital, Fort Campbell, KY
Bliss Army Community Hospital, Fort Huachuca, AZ
Brooke Army Medical Center, Fort Sam Houston, TX
*Darnall Army Community Hospital, Fort Hood, TX
Dewitt Army Community Hospital, Fort Belvoir, VA
Eisenhower Army Medical Center, Fort Gordon, GA
Evans Army Community Hospital, Fort Carson, CO
*Fitzsimmons Army Medical Center, Denver, CO
Hays Army Community Hospital, Fort Ord, CA
*Ireland Army Community Hospital, Fort Knox, KY
Irwin Army Community Hospital, Fort Riley, KS
Madigan Army Medical Center, Fort Lewis, WA
Martin Army Community Hospital, Fort Benning, GA
Moncrief Army Community Hospital, Fort Jackson, SC
*Walter Reed Army Medical Center, Washington, DC
William Beaumont Army Medical Center, Fort Bliss, TX
Womack Army Community Hospital, Fort Bragg, NC
Wood Army Community Hospital, Fort Leonard Wood, MO

*The Army Audit Agency audited these activities and agreed to provide us the audit results.

Department of the Navy

Director of Naval Medicine/Surgeon General of the Navy,
Washington, DC
Naval Medical Command, Washington, DC
Naval Medical Command, Northwest Region, Oakland, CA
Naval Medical Command, Southwest Region, San Diego, CA
Naval Medical Command, Northeast Region, Great Lakes, IL
Naval Medical Command, Southeast Region, Jacksonville, FL
Naval Medical Command, Mid-Atlantic Region, Portsmouth, VA
San Francisco Joint Military Medical Command, Oakland, CA
National Naval Medical Center, Bethesda, MD
Naval Hospital, Camp Lejeune, NC

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Naval Hospital, San Diego, CA

Department of the Air Force

Office of the Surgeon General, Washington, DC
Joint Military Medical Command, San Antonio, TX
857th Strategic Hospital, Minot Air Force Base, ND
832d Medical Group, Luke Air Force Base, AZ
U.S. Air Force Medical Center, Scott Air Force Base, IL
Air Force Systems Command Regional Hospital, Eglin Air
Force Base, FL
Air Force Systems Command Hospital, Patrick Air Force Base, FL
Malcolm Grow U.S. Air Force Medical Center, Andrews Air Force
Base, MD
Wright-Patterson U.S. Air Force Medical Center, Wright-Patterson
Air Force Base, OH
Wilford Hall U.S. Air Force Medical Center, Lackland Air Force
Base, TX
Robert L. Thompson Strategic Hospital, Carswell, Air Force
Base, TX
U.S. Air Force Academy Hospital, U.S. Air Force Academy, CO
David Grant Medical Center, Travis Air Force Base, CA
Air University Regional Hospital, Maxwell Air Force Base, AL
U.S. Air Force Medical Center, Keesler Air Force Base, MS

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